

Residential Trade Area

INTRODUCTION

Hammer, Siler, George Associates has been retained to conduct market analyses to determine the potential of the McMillan Reservoir site to support a variety of land uses. This memorandum presents the findings of our analysis into the market potential for residential development on the subject site. Given the location of the property at a busy intersection, the two major roads on its northern and eastern boundaries and, the proximity of the site to the hospital, we have determined that the highest and best use of the property for residential use is multiple family housing comprised of a mix of townhouses, condominiums and rental apartment units. Therefore, we have conducted an analysis of the potential of the site for these uses. Furthermore, for the purposes of this analysis we have broken down condominium and townhouse housing sales data and have instead assumed that in the trade area market, the vast majority of the owner occupied units under 1,000 square feet in size are condominiums. The following presents the methodology and findings for each category.

OWNER OCCUPIED HOUSING MARKET ANALYSIS

Introduction

In order to determine the number of units of each housing type that can be absorbed by the owner-occupied townhouse and condominium market, we have utilized the following methodology:

- Delineation of the Trade Area
- Demographic analysis.
- Market segmentation analysis to determine the characteristics of existing residents.
- An analysis of residential sales and absorption data.
- Development of five-year absorption forecasts for the McMillan property.

Delineation of the trade Area

The McMillan residential Trade Area has been defined as that area bounded by Missouri Avenue on the north, The Red Line Metro train line on the east, Rhode Island Avenue on the south, Georgia Avenue/US Route 29 on the west and, New Hampshire Avenue on the northwest. The

study area benefits from the inclusion of several major institutions: Washington Hospital Center (immediately north), Howard University (west), Catholic University of America (east), Trinity College (east) and the U.S. Soldiers Home (north). The area is served by five Metro rail stops: three on the eastern side and two within and adjacent to the southwestern corner, four of which are within a ten minute walk from the site.

Trade Area Demographics

Population and Households. Table 1 below provides comparative household and population data for the Trade Area and the District as a whole.

TABLE 1. POPULATION AND HOUSEHOLDS, 1980 - 2004

Year	Study Area		District of Columbia	
	Population	Households	Population	Households
1980	36,743	11,076	638,333	253,144
1990	36,188	11,477	606,900	249,634
1980 – 1990 Change	-1.5	3.6	-4.9	-1.4
1999 Total	30,134	9,522	515,642	220,244
1990 – 1999 Change	-16.7	-17	-15	-11.8
2004	27,876	8,732	478,981	207,787

Source: US Department of Commerce, Bureau of the Census and, Claritas, Inc.

The table reveals that like the District, the Trade Area has lost substantial population during the past 20 years, due to the continuing loss of residents to the suburbs and declining household sizes. Between 1990 and 1999 it is estimated that the Trade Area will have lost over 6,000 or 16.7 percent of its residents compared to 15 percent for the District as a whole. During the same period the Trade Area lost 1,650 households or 17 percent of its households compared to 11.8 percent for the District.

The Trade Area is thus losing both residents and households at a faster pace than the District as a whole. This suggests that the Trade Area is not competing well with other areas within the City for the residents who have chosen to remain and in attracting new residents from outside. In the absence of substantial investment and improvement in the area and/or changes in the tax structure, this decline is projected to continue at least in the short term over the next five years.

The average household income in the Trade Area is currently estimated at approximately \$47,500. This is substantially lower than the District as a whole at approximately \$65,800. Table 2 provides a breakdown of the distribution of households by household income for both the Trade Area and the District.

TABLE 2. HOUSEHOLDS BY HOUSEHOLD INCOME, 1999

Income Category	Trade Area		District of Columbia	
	Number	Percent	Number	Percent
Under \$ 10,000	1,381	14.5	25,763	11.7
\$ 10,000 to \$ 19,999	1,275	13.4	25,471	11.6
\$ 20,000 to \$ 24,999	533	5.6	11,366	5.2
\$ 25,000 to \$ 29,999	577	6.1	12,050	5.5
\$ 30,000 to \$ 34,999	796	8.4	14,827	6.7
\$ 35,000 to \$ 49,999	1,609	16.9	33,477	15.2
\$ 50,000 to \$ 74,999	1,683	17.7	36,974	16.8
\$ 75,000 to \$ 99,999	870	9.1	21,874	9.9
\$100,000 to \$149,999	528	5.5	19,506	8.9
\$150,000 and Over	270	2.8	18,936	8.6

Source: US Department of Commerce, Bureau of the Census and, Claritas, Inc.

The table reveals that the trade contains more poor households and fewer affluent households than the District as a whole. Within the Trade Area, 27.9 percent of households have incomes less than \$20, 000 per year compared to 23 percent for the District. At the other end of the scale, just 17.4 percent of Trade Area households have incomes above \$75,000 annually compared to 27.4 percent District-wide.

Economic and Social Characteristics. The Trade Area population is predominantly African American who constitute approximately 72 percent of the residents. Non-Hispanic whites are the second largest group comprising 21 percent. Approximately 6 percent of the residents are of Hispanic origin with Asian and all other minorities making up less than 2 percent of the population.

We have used market segmentation data provided by Claritas, Inc. to develop some general conclusions about different segments of the Trade Area population to provide insight into the type of person attracted to living in this area. The analysis reveals that 97 percent of the people living in this area fall into five categories. The largest group comprising 3,350 or 35 percent of all households is above average in ethnic diversity with a mix of service, white- and blue-collar employment. People in this group range in age from under 18 years of age to 34 years of age, are predominantly black and tend to live in urban row houses.

The second largest group of 2,450 or 26 percent of households is comprised of mobile, highly educated singles. The group is an eclectic mix of executives, students, artists and writers who prefer to live in urban high rises. Very few children are found in this ethnically diverse cluster which ranges in age from 25 to 44 years. The third group of 2,500 or 23 percent households are poor with a low level of educational attainment. The group is comprised of single black parents ranging in age between 18 to 34 years who live in multi-unit rental complexes.

The fourth group comprised of 850 or 9 percent of households is characterized by a mix of well educated, predominantly white and Asian residents who own their own homes in upscale neighborhoods near city-centers. The cluster is a mix of family types including singles without children and couples with and without children who are 55 years and older. The fifth group 350 or 4 percent of households is comprised of better educated residents than the fourth group but less affluent. These young professionals and executives with few children live in apartments, condominiums and townhouses near urban, private universities. The group ranges in age between 25 and 44 years.

It is the dynamic interplay of these five groups that creates a number of different images of the Trade Area. On the one hand the picture is one of an attractive urban neighborhood that is on the rise to one that is characterized by social problems.

Number and Types of Housing Inventory. Table 3 provides a breakdown of housing units by the number of units in the structure for the Trade Area as compared to the City as a whole.

TABLE 3. HOUSING UNITS BY UNITS IN STRUCTURE, 1990

Type of Unit	Trade Area		District of Columbia	
	Number	Percent	Number	Percent
Single Detached Unit	333	2.6	34,428	12.4
Single Attached Unit	5,295	42.0	71,471	25.7
Structures with 2 Units	465	3.7	8,697	3.1
Structures w/ 3-4 Units	852	6.8	21,635	7.8
Structures w/ 5-9 Units	1,091	8.7	20,603	7.4
Structures w/ 10-19 Units	2,332	18.5	37,207	13.4
Structures w/ 20+ Units	2,111	16.7	81,831	29.4
Mobile Homes or Trailers	9	0.1	79	0.0
Other Structures	121	1.0	2,538	0.9
Total	12,609	100	278,489	100

Source: US Department of Commerce, Bureau of the Census and, Claritas, Inc.

The table reveals that the dominant housing type in the Trade Area is the single family attached (townhouse/rowhouse) unit accounting for 42 percent of the housing stock compared with 26 percent of the District's housing units. At the same time, only 16.7 percent of housing units in the Trade Area are in buildings with 20 or more units compared to 29.4 percent for the City as a whole. This suggests a scarcity of apartment buildings in the Trade Area. The Trade Area also has a scarcity in the supply of single family detached units which account for only 2.6 percent of the housing stock compared to over 12 percent for the District. These differences in the structure of housing units reflect the Trade Area's strong historical urban character.

Housing Tenancy and Vacancy Characteristics. In 1990 there were 12,447 housing units in the Trade Area that can be analyzed by tenancy and vacancy. Of these units, 11,393 were occupied and 1,053 were vacant. This translates into a vacancy rate of 8.4 percent which compares favorably to a 10.4 percent vacancy rate for the City as a whole. In terms of tenancy, owners occupied 4,706 or nearly 38 percent of units compared to renters occupying 6,688 or 54 percent. The ownership percentage is higher than for the City as a whole which is 35 percent.

Housing Sales Characteristics – Trade Area and the District of Columbia

Introduction. The analysis of past residential sales provides clear insight into the nature and character of the housing market. The Trade Area is a subset of the District housing market and it is therefore important to compare the two markets to determine how well the trade area is performing in relation to the overall market. Such an analysis also provides important information regarding the differences between the Trade Area and the District housing markets. The first part of the analysis that follows is therefore a comparative analysis for both the Trade Area and the District. The second part of the analysis focuses specifically on the Trade Area absorption trends and forecasts.

Sales Trends. Table presents residential sales trends for condominium and townhouse sales for the Trade Area and the District between 1995 and 2000. The table reveals that residential sales in the Trade Area rose sharply between 1995 and 1998 and then tailed off slightly during 1999. The table also reveals that housing sales trends in the Trade Area have been generally reflective of sales in the district as a whole, and outperformed the District for the first four years of the period.

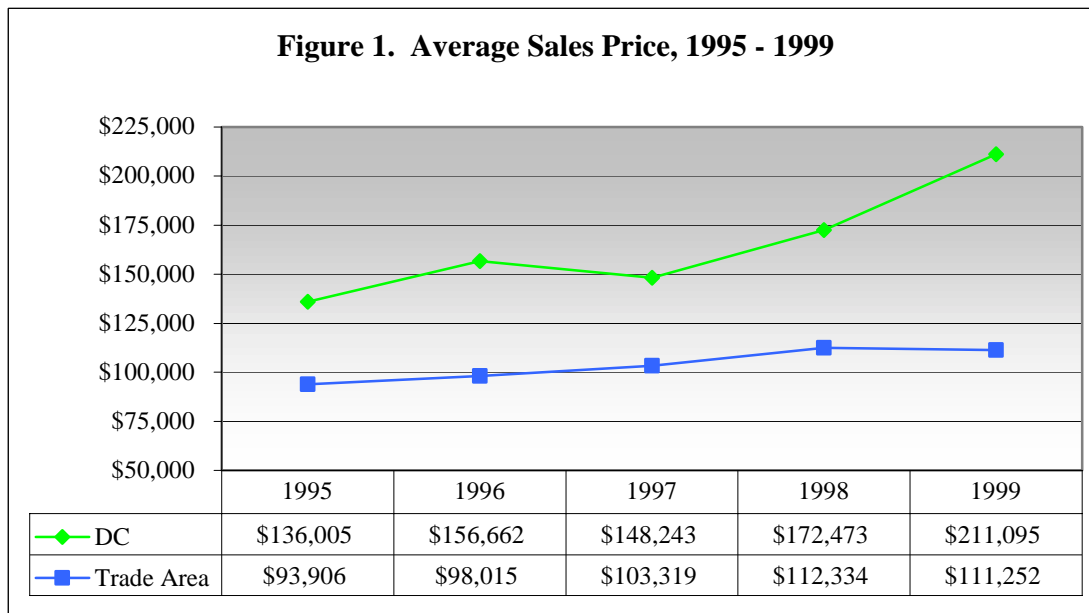
TABLE 4. TOWNHOUSE/CONDOMINIUM SALES PER YEAR

Year	Trade Area			District of Columbia		
	Sales	Change	% Change	Sales	Change	% Change
1995	89	-	-	1,705	-	-
1996	113	24	27.0	1,879	174	10.2

1997	219	106	93.8	3,425	1,546	82.3
1998	531	312	142.5	8,084	4,659	136.0
1999	311	(220)	(41.4)	5,499	(2,585)	(32.0)
Total	1,263	-	-	20,592	-	-

Source: First American Real Estate Solutions

Average Sales Price. Chart 1 presents the average sales prices for condominium and townhouse units for the District and the Trade Area during the past five years.



The Chart reveals that the average sales price in the Trade Area climbed steadily during the first four years and in fell slightly during 1999. Conversely, the average sales price in the District fluctuated during the first three years and climbed sharply during the past two years. This suggests that the prices in the Trade Area may well have hit their ceiling in what is currently a strong housing market throughout the District.

Sales Price Ranges. Table 5 provides total sales by sales price for both the Trade Area and the District between 1995 and 1999 for those units for which sales price information was available.

TABLE 5. ANNUAL SALES BY SALES PRICE, 1995 - 1999

Sales Price Range	Trade Area		District of Columbia	
	Number	Percent	Number	Percent
\$50,000 or Less	71	11.1	1,293	10.2
\$50,001 - \$75,000	82	12.9	1,440	11.4
\$75,001 - \$100,000	153	24.0	1,912	15.1
\$100,001 - \$125,000	139	21.8	1,764	14.0
\$125,001 - \$150,000	147	23.1	1,644	13.0
\$150,001 - \$175,000	30	4.7	976	7.7
\$175,001 - \$200,000	8	1.3	763	6.0
\$200,001 - \$225,000	6	0.9	553	4.4
\$225,001 - \$250,000	1	0.2	422	3.3
Over \$250,000	-	-	1,856	14.7
Grand Total	637	100.0	12,623	100.0

Source: First American Real Estate Solutions

The table reveals that nearly 70 percent of all sales in the trade area during the five year period were in the \$75,001 to 150,000 price range. This compares to 42 percent of sales being in this price range in the District as a whole. The table also shows that only 45 or 7 percent of units sold in the trade area sold for more than \$150,000 compared to 36 percent for the entire District. There were, however, similar proportions of home sales in the less than \$50,000 to \$75,000 price range in the Trade Area and the District during this period.

Square Footage. Another important trend in housing sales relates to housing size. Table 6 provides a breakdown of sales by size category between 1995 and 1999.

TABLE 6. SALES BY UNIT SIZE, 1995 - 1999

Size Range (Square Feet)	Trade Area		District of Columbia	
	Number	Percent	Number	Percent
1,000 or Less	125	9.9	7,152	35.8
1,001 - 1,500	672	53.2	7,340	36.7
1,501 - 2,000	314	24.9	3,289	16.4

2,001 - 2,500	108	8.6	1,260	6.3
2,501 and Above	44	3.5	953	4.8
Total	1,263	100.0	19,994	100.0

Source: First American Real Estate Solutions

The table shows that there were a much lower proportion of units sold in the Trade Area in the 1,000 square feet or less size range compared to the District as a whole. Since this size range typically relates to multi-story apartment style condominium units, the data can be explained by the much lower proportion of multiple family buildings in the Trade Area with over 20 units per building identified earlier.

Trade Area Absorption by Price Range

It is important to analyze the absorption for specific price ranges cross-tabulated by square foot ranges in order to assess the probable absorption rates. Table 7 presents the results of such an analysis for those units for which sales price information was available. Entries greater than 20 sales have been highlighted to reveal patterns in the data. The table clearly shows that the greatest concentration of sales took place in the \$75,001 to \$150,000 range and the 1,001 to 2,000 square feet range. Sales in these categories accounted for 324 or 51 percent of reported sales. Within this category, there is very little variation across the price range but a significant disparity across the size range. The sales in the size range of 1,001 to 1,500 square feet outnumber those in the 1,501 to 2,000 square feet range by a ratio of 2.5 to 1.

TABLE 7. SALES BY PRICE AND SIZE RANGES, TRADE AREA, 1995 – 1999

Price Range	1,000 or Less	1,001 - 1,500	1,501 - 2,000	2,001 - 2,500	2,501 and Above	Total
\$50,000 or Less	27	25	13	4	2	71
\$50,001 - \$75,000	9	47	14	10	2	82
\$75,001 - \$100,000	21	83	33	9	7	153

\$100,001 - \$125,000	5	83	35	15	1	139
\$125,001 - \$150,000	5	90	34	16	2	147
\$150,001 and Over	-	9	21	7	8	45
Total	67	337	150	61	22	637

Note: Only includes those units for which price information was available.

Source: First American Real Estate Solutions

Trade Area and McMillan Site Townhouse and Condominium Absorption Forecasts

The preceding analyses have revealed that the Trade Area housing market is performing well in relation to the District. The analyses also revealed differences between the Trade Area market and the District market. As previously noted, for the purposes of this analysis we have assumed that the vast majority of units under 1,000 square feet in size are condominiums.

**TABLE 8. AVERAGE ANNUAL ABSORPTION FORECASTS,
2000 - 2004**

Price Range	Average Annual Absorption			
	Townhomes		Condominiums	
	Low	High	Low	High
\$50,000 or Less	15	20	10	15
\$50,001 - \$75,000	25	30	3	5
\$75,001 - \$100,000	45	55	5	10
\$100,001 - \$125,000	50	60	3	5
\$125,001 - \$150,000	50	60	3	5
\$150,001 and Above	15	20	0	3

Total	200	245	24	43
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Source: First American Real Estate Solutions

Table 8 presents the both low and high 5-year average annual absorption forecasts for townhouses and condominiums for the Trade Area by price range. The absorption forecasts that have been developed have been based on current conditions within the Trade Area and do not reflect substantial improvements and investment for the LeDroit Park/Howard University part of the Trade Area currently in the planning stages.

We have forecast between 200 and 245 townhouse sales and between 24 and 43 condominium sales annually between 2000 and 2004.

ASSESSMENT OF RENTAL APARTMENT MARKET POTENTIAL

Introduction and Methodology

One of the potential uses of the subject property is for rental apartment units. The site's proximity to adjacent major student and employment centers such as Howard and Catholic universities, Washington Hospital and the Soldiers Home, coupled with its proximity and excellent accessibility to downtown, present a favorable locational environment for rental apartment apartments.

We have conducted an analysis of the supply of rental units in the trade area and the existing District rental apartment market conditions and those of the trade area. Based on this information we have then generated estimates for the number of rental apartment units that could be supported by the market on the subject property and competitive monthly rents by unit size.

Supply of Rental Apartment Units

We have utilized 1990 census data to generate estimates for the number of rental units currently in the trade area. We estimate that there are currently approximately 7,000 rental units in the

trade area comprised of approximately 7 percent efficiency, 50 percent 1 bedroom units, 30 percent two bedroom units and 16 percent with 3 or more bedrooms. Based on these percentages, a large proportion of the rental units are likely apartment units, 2 bedrooms and less in size and a much smaller percentage of rental houses. We would conservatively estimate that at present there are between 5,600 and 6,300 rental apartment units in the trade area.

Demand Analysis

We have utilized an expressed demand approach in order to generate estimates for the unmet demand for rental apartment units in the trade area. To determine the magnitude of the demand, we have examined published vacancy rates for the District of Columbia, conducted our own research into vacancy rates in the trade area, and compared the results with a five percent vacancy rate that is widely considered full or “stabilized” occupancy for bank lending purposes. This differential between any vacancy rate lower than five percent can be expressed as explicit demand and converted to the number of apartment units that can be constructed while maintaining a tight rental market.

Survey data for September 1999 released by Delta Associates, an Alexandria based real estate research company, revealed that the District rental apartment market was extremely tight with vacancy rates less than 1 percent. The data was based on rental apartment complexes in the 150 to 200 unit range. Data released by Marcus and Millichap based on 50 to 100 unit buildings suggested a vacancy rate around 2.5 percent. Our own research of apartment buildings within the trade area suggests a vacancy rate of between zero and one percent. Based on this data, we would estimate that there is currently an unmet demand for an additional 225 and 315 rental apartment units in the trade area.

McMillan Site Rental Apartment Market Potential and Rental Rates

Given the very high occupancy rates in the trade area and elsewhere in the District, and in the absence significant new rental apartment construction, a new rental apartment development on the subject site should be capable of capturing close to 100 percent of total market potential for

the trade area. We would conservatively estimate a market potential for between 200 and 250 units on the subject site.

Our research suggests competitively rents for a new development the subject site of approximately \$600 per month for an efficiency unit, \$750 for a one bedroom unit and \$800 for a two bedroom unit.

SENIOR HOUSING MARKET POTENTIAL

Introduction

In addition to market rate residential apartments on the subject property, there also exists the possibility that the development program could include an assisted senior housing component. We have therefore conducted an analysis of the assisted senior housing market in the District, relying primarily on data provided by the District Housing Authority.

Senior Housing Demand

Table 9 provides a summary of our estimates for the current unmet resident demand for subsidized senior housing in the District and a projection for 2004.

TABLE 9. SENIOR HOUSING DEMAND IN THE DISTRICT OF COLUMBIA, 1999 AND 2004

Variable	1999	2004 Projection
Population Over 65	80,101	76,653
Total Estimated Subsidized Senior Housing Residents*	3,980	3,980
Number on Waiting Lists	145	(33)
Total Expressed Demand	4,125	3,948

Expressed Demand Percentage	5%	5%
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* Note: Based on DCHA estimates of 1.2 persons per unit.

Sources: Bureau of the Census, US Department of Commerce, Claritas, DCHA and Hammer, Siler, George Associates

For the purposes of this analysis, we have assumed the unmet demand to be equivalent to the number of persons waiting for units. This is justified by the very high occupancy rates in the existing senior housing developments, at 100 percent or close to it in many cases. However, it should be stressed that due to lower unit turnover rates than market rate rental apartment buildings, rates of this level are typically required for subsidized senior housing projects and such rates are often assumed for financial feasibility purposes.

Based on this premise, we estimate that there is currently a demand for additional units capable of accommodating approximately 145 residents. Utilizing the 1.2 persons per unit figure provided by the DCHA, this translates to a demand for approximately 121 units. As previously noted, the District population is expected to continue to decline during the next five years. This general decline as people move to the suburbs, including seniors, is expected to outpace growth in the senior population as the as the District population ages. As a result, by the year 2004 there is a projected surplus of subsidized senior housing, with the existing stock capable of accommodating an additional 33 residents or 28 units.

Planned Projects

There is currently one additional project under construction in the southeastern part of the District, Wheeler Creek at Wheeler Road and Mississippi Avenue. The development will be completed by June of this year and will provide 180 new units. This development should be capable of satisfying existing unmet demand in the District.

Conclusions and Recommendation

While the District subsidized senior housing market is currently capable of supporting accommodation for an additional 120 units. The Wheeler Creek development will be capable of absorbing much if not all of this demand during the latter part of 2000. Our analysis has also revealed that by the year 2004, there will be a surplus of senior housing in the District market. As a result we do not recommend senior housing as a component of the development program for the McMillan property.